

REMARKS

Claims 22-24 are now pending in the application. Claims 1-21 have been cancelled. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

DRAWINGS

The drawings stand objected to for certain informalities. Applicant has attached revised drawings for the Examiner's approval. In the "Replacement Sheet", Figure 2 has been amended to indicate the location of power box 24, Figure 3 has been amended to indicate the location of the access cover 28 and Figure 5 has been amended to more clearly indicate the location of the faceplate 40. The Examiner requested that Figure 2 identify an opening with reference numeral 44. Applicant respectfully submits that Figure 2 is prior art and as such, the opening included in the power port 20, shown in Figure 2, is not the same opening as opening 44 in replacement cover 40, shown in Figure 4. Accordingly, the openings should not be similarly identified. Additionally, the opening in the power port 40 is not described in the specification and is not material to the invention, therefore, no reference numeral identifying such opening is required. Furthermore, Figure 5 has been amended to more clearly illustrate aspects of the invention as described in the specification, which has been amended as indicated above to more clearly correlate with amended Figure 5.

SPECIFICATION

As indicated above, in accordance with the Examiner's request, the specification as filed is to be replaced with the attached substitute specification. The substitute specification contains no new matter.

The Examiner comments that pages 3 and 4 call for the replacement cover of the invention to be of the same dimensions as the cover being replaced and that Figures 2 and 4 show different size covers. Applicant respectfully directs the Examiner attention to paragraph [0027], third sentence, which recites, "It should be noted that the dimensions of the faceplate may be modified based upon the size and orientation of the connectors, as well as the particular passenger seat 22 configuration." Notwithstanding this,

Applicant respectfully submits that there is no indication in the drawings or the specification that Figures 2 and 4 are drawn to scale with each other. Therefore, although the covers illustrated in Figures 2 and 4 appear to be different size, they may in fact be substantially the same size in accordance with an embodiment described in the specification.

The Examiner also comments that Figure 5 illustrates wiring/cables 49, but the specification does not recite the numeral 49. Applicant has amended the specification, particularly paragraph 28, to identify the wires or cables by the numeral 49.

REJECTION UNDER 35 U.S.C. § 112

I. Claims 22-24 stand rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement. The Examiner submits that subject matter of Claims 22-24 is not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor had possession of the claimed invention. This rejection is respectfully traversed.

1. Regarding Claim 22, as amended, Claim 22 recites, "A method for retrofitting a power port assembly on board an aircraft to accommodate additional connectivity for communicatively connecting a portable electronic device to an on-board service system, said method comprising: removing a face plate from a power port box connected to an aircraft passenger seat, the face plate providing access to a power port housed within the power port box; connecting an on-board service system data communications cable routed within the cable box to a data port integrally formed with a replacement cover that includes an opening for providing access to the power port; and coupling the replacement cover to the power port box in a spring loaded manner such that the data communications cable is enclosed within the power port box, thereby enabling a passenger to connect a portable electronic device to the data port in order to communicatively connect the on-board service system."

Applicant respectfully submits that all the recitations of amended Claim 22 are described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor had possession of the claimed invention. Particularly:

a. "A method for retrofitting a power port assembly on board an aircraft to accommodate additional connectivity for communicatively connecting a portable electronic device to an on-board service system", is supported at least in paragraph 11.

b. "Said method comprising: removing a face plate from a power port box connected to an aircraft passenger seat, the face plate providing access to a power port housed within the power port box", is supported at least in paragraph 13. Paragraph 13 describes a replacement cover, which to one skilled in the art would describe removing a face plate such that it can be replaced by the replacement cover.

c. "Connecting an on-board service system data communications cable routed within the cable box to a data port integrally formed with a replacement cover that includes an opening for providing access to the power port", is supported at least in paragraphs 9 and 12. Paragraph 12 describes connecting appropriate wiring to the connectors based upon the connector type and using an existing communication box to provide wiring for the connectors. One skilled in the art would recognize "using an existing communication box to provide wiring for the connectors" to describe that the data communications cable is routed within the cable box. Paragraph 9 describes the replacement cover including an opening therein to allow access to an existing power port and a plurality of connectors integrally formed therewith and adapted for connection to portable electronic devices for communicating with systems on-board the commercial aircraft.

d. "And coupling the replacement cover to the power port box in a spring loaded manner such that the data communications cable is enclosed within the power port box, thereby enabling a passenger to connect a portable electronic device to the data port in order to communicatively connect the on-board service system", is supported at least in paragraph 27. Paragraph 27 describes, that, in one preferred embodiment, the replacement cover is spring loaded. One skilled in the art would recognize 'spring loaded' to be a well known, commonly used term to indicate that a first object is attached to a second object

in a biased manner such that, when moved, either the first or second object will return to an original position due to the biased connection. Therefore, one skilled in the art would immediately understand the term 'spring loaded', as described in the specification, to mean that the replacement cover is connected to the power port box in a biased manner such that if the replacement cover is lifted or moved, it will return to and remain in an original position that encloses the data communications cable within the power port box.

Additionally, paragraph 27 describes that appropriate cables provide connectivity from the data port to the on-board service system. Furthermore, one skilled in the art would immediately recognize that cables routed within the cable box, as described in Paragraph 12, that has the replacement cover coupled thereto are enclosed within the cable box.

Thus, all the recitations of amended Claim 22 are described in the specification in full and sufficient detail such as to reasonably convey to one skilled in the art that the inventor had possession of the claimed invention.

2. Regarding Claim 23, in accordance with the remarks set forth above with regard to amended Claim 22, Applicant respectfully submits that all the recitations of amended Claim 23 are likewise described in the specification in full and sufficient detail such as to reasonably convey to one skilled in the art that the inventor had possession of the claimed invention.

3. Regarding Claim 24, the recitations of Claim 24 are supported at least in paragraph 8. Paragraph 8 describes that the plurality of data ports are adapted for connection to portable electronic devices, such as, for example, a portable computer, for communicating with on-board systems.

II. Claims 22-24 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. This rejection is respectfully traversed.

In accordance with the present amendments made to Claims 22 and 23, and the remarks set forth above, Applicant respectfully submits that Claims 22-24 particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Therefore, for at least the reasons set forth above, Applicant requests that the §112 rejections of Claims 22-24 be withdrawn.

DRAWING OBJECTIONS UNDER 37 CFR. § 1.83(a)

The drawing are objected to under 37 CFR §1.83(a). This objection is respectfully traversed. The Examiner submits that the drawings do not show every feature of the invention specified in the claims, particularly connecting communications cables to the data ports and coupling the replacement cover to the power port box in a spring loaded manner.

Figure 5 clearly illustrates the wires or cables 49 connected to the RJ-45 connector 46 and USB connector 48.

Additionally, Figure 5 clearly illustrates the replacement cover 40 coupled to the power port box 20. Under 37 CFR §1.83(a) conventional features disclosed in the description and claims need not be shown in the drawings where their detailed illustration is not essential for proper understanding of the invention. Applicant respectfully submits that Claims 22-24 are method claims and, as such, devices that are not essential to an understanding of the function described in the method claim, need not be shown. Furthermore, as set forth above, one skilled in the art would recognize 'spring loaded' to be a well known, commonly used term to indicate that a first object is attached to a second object in a biased manner such that, when moved, either the first or second object will return to an original position due to the biased connection. Therefore, one skilled in the art would immediately understand "coupling the replacement cover to the power port box in a spring loaded manner" to mean that the replacement cover is connected to the power port box in a biased manner without a biasing device, such as a spring, being illustrated in Figure 5. Therefore, for at least the reasons set forth above, a spring loading or biasing device need not be shown in the drawings because its detailed illustration is not essential for proper understanding of the invention.

For at least the reasons set forth above, Applicant respectfully requests that the objections to the drawings under 37 CFR §1.83(a) be withdrawn.

As set forth above, and in accordance with the Examiner's request, 'Replacement Drawings' are being submitted herewith.

REJECTION UNDER 35 U.S.C. § 103

Claims 22-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art in view of Thompson (U.S. Pat. No. 5,114,365) and Luu (U.S. Pat. No. 5,384,428). This rejection is respectfully traversed.

As amended, Claim 22 recites, "A method for retrofitting a power port assembly on board an aircraft to accommodate additional connectivity for communicatively connecting a portable electronic device to an on-board service system, said method comprising: removing a face plate from a power port box connected to an aircraft passenger seat, the face plate providing access to a power port housed within the power port box; connecting an on-board service system data communications cable routed within the cable box to a data port integrally formed with a replacement cover that includes an opening for providing access to the power port, and coupling the replacement cover to the power port box in a spring loaded manner such that the data communications cable is enclosed within the power port box, thereby enabling a passenger to connect a portable electronic device to the data port in order to communicatively connect the on-board service system."

Neither the admitted prior art, Thompson or Luu describe, show or suggest a method for retrofitting a power port assembly on board an aircraft to accommodate additional connectivity for communicatively connecting a portable electronic device to an on-board service system. Moreover, neither the admitted prior art, Thompson or Luu describe, show or suggest such a method including connecting an on-board service system data communications cable routed within the cable box to a data port integrally formed with a replacement cover. Rather, the admitted prior art describes a power port assembly 20 that includes a power port 26. Thompson, describes a wall plate 10 for use with a standard electrical outlet that includes an extended portion 14 for mounting a modular telephone jack and a coaxial video cable. The extended portion 14 elongates the front surface 20 and back surface 24 of the wall plate 10 beyond one side of a conventional electrical box. Thus, the telephone and coaxial cables are routed outside

of the electrical, not within the electrical box. Luu describes a receptacle wall plate having built-in circuitry for protecting electrical devices plugged into the receptacle and contains circuitry to protect other secondary devices such as a phone, fax machine or modem. Figure 1 of Luu appears to illustrate only electrical power wires routed with the wall outlet box 60. Also, Figures 4 and 5 appear to illustrate elongated wall plates 10 where the elongated section includes jacks 72 and connectors 78 and extends past the perimeter of the wall outlet box 60 such that wires or cables connected to the jacks 72 or the connectors 78 would be routed outside of the wall outlet box 60. Furthermore, in reference to Figures 4 and 5, Luu describes that additional space to accommodate the protection circuitry for the secondary devices can be provided along the top, sides or bottom of the wall plate 10. Figures 4 and 5 appear to illustrate this additional space as a raised cavity in the elongated portion of the wall plate 10 that protruded from the front side of the wall plate 10 such that wires or cables connected to the jacks 72 or the connectors 78 would be routed outside of the outlet box 60.

Further yet, neither the admitted prior art, Thompson or Luu describe, show or suggest such a method including coupling the replacement cover to the power port box in a spring loaded manner. Rather, the admitted prior art describes a faceplate 32 connected to the power port assembly 20 at attachment points 60. Thompson describes that wall plate 10 is attached to the outlet in a conventional manner by screw 54. Luu describes that the wall plate 10 is assembled over electrical outlet 50 by a recessed screw 15.

Additionally, it is well recognized that absent some teaching, suggestion or incentive supporting the combination of the cited references, obviousness cannot be established by merely suggesting that it would have been obvious to one of ordinary skill in the art to have selected an alternative design choice. Applicant submits that it would not have been an obvious matter of design choice and there is no suggestion or motivation to combine the teachings of these references to construct the present invention as recited in amended Claim 22.

Therefore, for at least the reasons set forth above, Applicant respectfully submits that amended Claim 22 is patentable over the admitted prior art in view of Thompson and Luu.

Claims 23 and 24 depend from amended Claim 22. When the recitations of Claims 23 and 24 are considered in combination with the recitations of amended Claim 22, Applicant submits that Claims 23 and 24 are likewise patentable over the admitted prior art in view of Thompson and Luu.

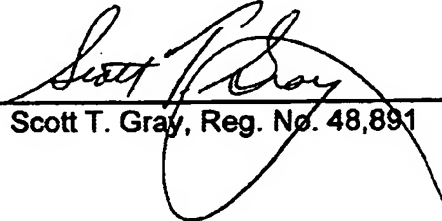
For at least the reasons set forth above, Applicant respectfully requests that the §103 rejection(s) of Claims 22-24 be withdrawn.

CONCLUSION

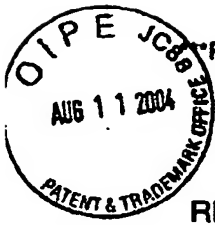
It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 726-7525.

Respectfully submitted,

Dated: 8/11/04

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REPLACEMENT COVER HAVING INTEGRATED DATA PORTS FOR POWER PORT ASSEMBLY ON COMMERCIAL AIRCRAFT

FIELD OF THE INVENTION

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[0001] The present invention relates generally to commercial aircraft, and more particularly to a replacement cover for a power port assembly to allow for connection of portable electronic devices to communicate with on-board systems.

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BACKGROUND OF THE INVENTION

[0002] In commercial aircraft, it is typical to provide connectors as part of the passenger seats to access different on-board systems and services.

15 For example, a headphone connector for connection to headphones may be provided to use in listening to on-board entertainment (e.g., preprogrammed music or audio accompanying movies). Further, as part of seatback telephones, integrated connectors for connection to portable computers for use in, for example, sending and receiving emails may be provided.

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[0003] With the increased use of portable electronic devices, such as, for example, portable computers and personal digital assistants (PDAs), while in-transit, the need to provide additional services (e.g., Internet access) has become more important. For example, broadband communication services on-board commercial aircraft allowing two-way broadband data and entertainment
25 are provided by the Connexion By Boeingsm system. Using this system, services, including the Internet, using their portable computer or other portable electronic device.

[0004] In order to access these services, new connectors for connection to the portable electronic devices must be provided. However, because the certification process for passenger seats is very costly and time consuming (i.e., 9-12 months), airline companies do not want to modify their passenger seats to install new system connectors (e.g., connectors for accessing the Connexion By BoeingSM system), thereby risking recertification. Therefore, a problem exists with respect to providing the required connectors for use by the passenger, while having the least amount of impact to the passenger seat and existing certification. In particular, it is desirable to provide the connectors on passenger seats in an aesthetically pleasing package, and in a package that provides ease of access, to thus encourage and facilitate usage of the connector.

[0005] Typically, recertification testing is required when the modification results in changing of the retention factors, attachment points and/or hardware. Thus, there exists a need to provide connectors for use with on-board systems that are installed using existing attachment points and hardware, and wherein the weight increase caused by the connector is insignificant so as to not invalidate previous testing results.

SUMMARY OF THE INVENTION

[0006] The present invention provides an interface for use on-board a commercial aircraft for connecting portable electronic devices to on-board systems. The interface is provided in combination with an existing PC Power connector (i.e., power port assembly) and includes a plurality of connectors. In one preferred embodiment, the interface is constructed as a replaceable cover or faceplate that utilizes existing bracketing and attachment points to provide the connectors. The installation increases the overall system weight of each passenger seat a minimal amount (i.e., about 1.5 pounds), and does not increase the weight of the passenger seat due to the removal of the old

cover when installing a cover of the present invention. Thus, using the existing attachment points and hardware, the modification of the existing power port assembly to include integrated connectors according to the present invention does not require recertification testing because the added weight is insignificant.

5 **[0007]** Specifically, in combination with a power port assembly providing power to portable electronic devices while in transit on a mobile platform (e.g., commercial aircraft), an interface of the present invention includes a cover adapted for connection to the power port assembly and configured for attachment thereto within the existing structure of the power port assembly. The
10 cover has provided therewith a plurality of connectors adapted for connection to portable electronic devices. Existing bracketing and attachment points (e.g. mounting holes) are used to connect the replacement cover to the power port assembly. Further, the cover is adapted for connection to existing connection members (e.g., fasteners) of the power port assembly.

15 **[0008]** The plurality of connectors are adapted for connection to portable electronic devices, such as, for example, a portable computer, for communicating with on-board systems. More particularly, the plurality of connectors may be configured for connection to an RJ type cable or a USB type cable. The connection is provided via an appropriate cable (e.g., standard
20 telephone line or network cable). The power port assembly may be provided as part of a passenger seat on-board an aircraft, with the plurality of connectors accessible by a passenger within the passenger seat.

[0009] The present invention also provides a replacement cover for a power port assembly on a commercial aircraft having about the same
25 dimensions as a cover being replaced, and includes an opening therein to allow access to an existing power port. The replacement cover includes a plurality of connectors integrally formed therewith and adapted for connection to portable

electronic devices for communicating with systems on-board the commercial aircraft. The connectors may be configured for connection to different types of cables including, for example, an RJ type cable, a USB type cable or other network type cables.

5 **[0010]** The replacement cover further may include connection means adapted for use in connecting the replacement cover to existing fasteners. In one preferred embodiment, the replacement cover is preferably configured with a width of about five inches and a length of about three inches.

10 **[0011]** A method of retrofitting a commercial aircraft to provide connectors for connection with portable electronic devices to access on-board systems is also provided. The method includes removing an existing cover of a power port assembly and attaching a replacement cover adapted for connection using existing mounting members. The replacement cover has an opening therein for accessing a power port, and is provided with a plurality of connectors
15 for connection to portable electronic devices for communicating with systems on-board the commercial aircraft

[0012] The method further may include connecting appropriate wiring to the connectors based upon the connector type and using an existing communication box to provide wiring to the connectors. The connectors
20 preferably are adapted for connection to different laptop computer interfaces.

[0013] Thus, the present invention provides a replacement cover and method of retrofitting a commercial aircraft, and in particular, an existing power port assembly, to provide connectors for use in connecting portable electronic devices to on-board systems (e.g., to access the Internet). The
25 replacement cover allows access to the power port and uses existing bracketing and attachment points for connection to the power port assembly. Thus,

recertification testing will not be required when using a replacement cover of the present invention.

[0014] Further areas of applicability of the present invention will become apparent from the detailed description provided hereinafter. It should be understood that the detailed description and specific examples, while indicating the preferred embodiment of the invention, are intended for purposes of illustration only and are not intended to limit the scope of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] The present invention will become more fully understood from the detailed description and the accompanying drawings, wherein:

[0016] Fig. 1 is a front perspective view of a power port assembly in a commercial aircraft;

[0017] Fig. 2 is a plan view of a power port assembly in a commercial aircraft showing the existing cover of the assembly;

[0018] Fig. 3 is a bottom perspective view of a power box of the power port assembly;

[0019] Fig. 4 is a plan view of a cover constructed according to the principles of the present invention for replacing the existing cover of the power port assembly; and

[0020] Fig. 5 is ~~an elevation~~ a side view of the cover of the present invention connected to a power port assembly that is attached under a seat.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0021] The following description of the preferred embodiments is merely exemplary in nature and is in no way intended to limit the invention, its application, or uses. Thus, although a cover of the present invention for use with a power port assembly on a commercial aircraft is configured with certain dimensions and described having specific connectors, other dimensions, configurations and connectors are contemplated depending upon the type of power port assembly and connections needed or desired.

[0022] With respect to power port assemblies provided within commercial aircraft for powering portable electronic devices, such as portable computers and PDAs, this further may be understood with reference to Figures 1 and 2 by example. Thus, before further describing the invention, it is useful to understand power port assemblies provided within the main cabin of commercial aircraft for use by passengers to power portable electronic devices, and in particular the construction of such assemblies.

[0023] Referring to Figures 1, 2 and 3, it is common ~~it is common~~ in many of the Economy Class passenger seats in commercial aircraft to have power port assemblies installed as shown in Figures 1 and 2, and indicated generally by reference numeral 20. Connection of the power port assembly 20 to a passenger seat 22 is provided using fasteners, such as, for example, locking tie wraps (not shown). In particular, a power box 24, as shown in ~~Fig. 3~~ Figure 1, and a power port 26 (e.g., cigarette type or 2 or 3 prong type), which may be concealed by an access cover 28, as shown in Figure 3, when not in use, are secured to a front beam 30 under the passenger seat 22 to provide access by a passenger seated therein to a power supply. The power box 24 provides appropriate AC or DC power (e.g., 115V AC or 28V DC) depending upon system requirements. The power port 26 provides for connection to a portable electronic

device to provide power from the power box 24 for operating the portable electronic device.

[0024] The power port assembly 20 is typically installed on commercial aircraft to provide service to one of the two, or two of the three passenger seats in an Economy Class seat group. However, power port assemblies 20 may be provided in other sections of the commercial aircraft. Essentially, the power port assembly 20 is installed (i.e., secured), attached) under ~~[[the]]~~ a seat bottom cushion of passenger seats 22 within the commercial aircraft. Thus, as shown in Figures 1 through 3, a typical power port assembly 20 includes a power box 24 (i.e. Power Converter) ~~also known as an In-Seat Power Converter (ISPC) 54~~, which converts aircraft AC voltage of 115/400 Hz to 115/60 Hz AC or 28 VDC, a passenger interface (i.e., power port 26), system wiring, bracketing and a cover/faceplate or shroud 32. The cover/faceplate conceals and protects the Power Port/outlet from liquid spills, food and accidental passenger damage when not in use.

[0025] Referring to Figures 4 and 5, having Having described an exemplary power port assembly 20 installed within commercial aircraft to provide power to portable electronic devices used by passengers within the aircraft, the present invention provides a replacement cover 40 to provide additional connectivity for portable electronic devices to access services (e.g., enhanced services such as the Internet) provided by on-board systems. ~~Generally, a replacement cover or faceplate 40 constructed according to the principles of the present invention is shown in Fig. 4.~~

[0026] The replacement cover 40 uses the existing space and structure of the power port assembly 20 to allow for connection to on-board systems. In particular, the replacement cover 40 replaces the existing cover/faceplate or shroud 32 and may be mounted using the existing bracketing

and attachment points as shown in ~~Fig. 5~~ Figure 4. Essentially, the replacement cover 40 is installed in place of the cover/faceplate or shroud 32 and incorporates (i.e., allows access) to the existing power port 26 and provides connectors 42 for connection to on-board systems (e.g., Connexion By BoeingSM). It should be noted that the power port assembly 20 is installed using a plate bracket 43, shown in Figure 5, that spans the seat beams (i.e., forward seat tube 45 and aft seat tube 47) and is held in place using, for example, nylon tie straps or bolts/screws (not shown). The power port assembly 20 attaches to the plate bracket 43.

[0027] Specifically, the replacement cover 40 is constructed according to the requirements of the particular power port assembly 20, and in particular, the dimensions of the cover/faceplate or shroud 32 to be replaced. In one preferred embodiment, the replacement cover or faceplate 40 is spring loaded and has the following approximate dimensions: five inches wide by three inches high. It should be noted that the dimensions of the faceplate may be modified based upon the size and orientation of the connectors, as well as the particular passenger seat 22 configuration. The replacement cover 40 includes an opening 44 for accessing the existing power port 26. An access cover (not shown) may be provided to conceal the power port 26 when not in use. In this embodiment, two RJ-45 connectors 46 and two USB connectors 48 are provided for use in connecting portable electronic devices to on-board systems. Appropriate wiring or cables are included to provide connectivity from the connectors 42 to the on-board systems as required. It should be noted that other connectors 42 may be provided instead of or in addition to the connectors 42 as shown in Fig. 4, and include, for example, RJ-11 and mini USB connectors.

[0028] With respect to installing the replacement cover 40, existing bracketing and attachment points 60 (e.g., mounting holes) are used to connect the replacement cover 40 to the power port assembly 20 to provide the

connectors 42 for accessing on-board systems. Such connection members 60 are standard and well known in the art. Wires or cables 49 from on-board systems are preferably routed from the aircraft cable raceway through an existing Seat Electronics Box 50 ~~shroud~~ shown in Figure 1, along the seat frame into
5 [[the]] an In-Seat Power Converter 51, shown in Figure 5, mounted horizontally on the plate bracket 43 attached to the forward and aft seat tubes 45, 47. If an Inflight Entertainment System (IFE) is not installed in the passenger seats 22 to which the replacement cover 40 is to be provided, the wires or cables are routed from the aircraft cable raceway along the seat structure as inconspicuously as
10 possible to prevent passenger damage.

~~[0026]~~ ~~[0029]~~ Thus, the present invention provides a replacement cover 40 and method of retrofitting a commercial aircraft that provides additional connectors for connection to on-board audio, video or digital information services, and uses existing brackets and attachment points for installation. The
15 replacement cover 40 allows for access to an existing power port 26 of the power port assembly 20.

~~[0026]~~ ~~[0030]~~ Although the application of the present invention as disclosed herein is generally directed to a replacement cover 40 having specific dimensions and connectors provided therewith, it is not so limited, and the
20 replacement cover 40 may be configured according to the dimensions of the existing power port assembly 20 and accompanying cover/faceplate or shroud 32. The replacement cover 40 also may include additional or different connectors 42 depending upon the requirements of the on-board systems

~~[0026]~~ ~~[0031]~~ The description of the invention is merely
25 exemplary in nature and, thus, variations that do not depart from the gist of the invention are intended to be within the scope of the invention. Such variations are not to be regarded as a departure from the spirit and scope of the invention.

ABSTRACT OF THE DISCLOSURE

The present invention provides a replacement cover or faceplate for use with an existing power port assembly on a commercial aircraft that provides additional connectivity to on-board systems using portable electronic devices, while minimizing the need for recertification for installation. The replacement cover or faceplate is installed within the existing structure of the power port assembly using existing bracketing and attachment points. The cover allows access to an existing power port while providing a plurality of connectors for connection to on-board systems.